

Title (en)
BRANCH TEE, FOR SPRINKLER PIPES, AUTOMATICALLY CONTROLLING WATER STREAM AND SPRINKLER PIPE SYSTEM INCLUDING SAME

Title (de)
VERZWEIGTES TEE FÜR SPRINKLERROHRE ZUR AUTOMATISCHEN STEUERUNG EINES WASSERSTROMS UND SPRINKLERROHRSYSTEM DAMIT

Title (fr)
TÉ DE DÉRIVATION, POUR TUYAUX D'ARROSEUR, DE COMMANDE AUTOMATIQUE DE FLUX D'EAU ET SYSTÈME DE TUYAU D'ARROSEUR LE COMPRENANT

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Abstract (en)
Disclosed are a branch tee for sprinkler pipes that automatically controls water stream, and a sprinkler piping system including the same. According to an aspect of the present disclosure, the branch tee for sprinkler pipes that automatically controls water stream may include: a branch tee body; an inlet formed on a side wall of the branch tee body and connected to a water supply pipe; a first outlet formed on a first end of the branch tee body and connected to a pipe of a closed-type sprinkler head; a second outlet formed on a second end of the branch tee body and connected to a pipe of an open-type sprinkler head; and a piston valve disposed in the branch tee body and configured to adjust a flow path cross-sectional area of a first flow path from the inlet to the first outlet and to open and close a second flow path from the inlet to the second outlet while moving between a first position and a second position spaced apart from each other in a longitudinal direction of the branch tee body, the piston valve comprising a main valve body, a sub-valve body spaced apart from the main valve body in the longitudinal direction of the branch tee and formed with a smaller diameter than the main valve body, and a connecting member connecting the main valve body and the sub-valve body, wherein a first space portion, a second space portion, a third space portion and a fourth space portion partitioned by the branch tee body are successively formed from the first end to the second end within the branch tee body, the first space portion being connected to the first outlet and having a greater diameter than the second space portion, the second space portion having a greater diameter than the third space portion, the third space portion being connected to the inlet and having a greater diameter than the fourth space portion, the fourth space portion being connected to the second outlet and having a smaller diameter than the sub-valve body, wherein, when the piston valve is at the first position, the main valve body is disposed in the first space portion, and the second flow path is opened through the inlet, the third space portion, the fourth space portion and the second outlet, and when the piston valve is at the second position, the main valve body is disposed in the second space portion, and the second flow path is closed by the sub-valve body.

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